

Incorporating Information Literacy into the Curriculum: A Faculty Guide

Information literacy is fundamental to academic success.

Information Literacy is the set of skills needed to find, retrieve, analyze, and use information. The integration of these competencies into your curriculum challenges students to improve both the quality of their assignments and their thinking abilities. It will also help students meet the VSC Graduation Standard: Graduation Competencies in Information Literacy.

The librarians at the Vermont State Colleges encourage your involvement in this process. The purpose of this guide is to provide you with practical suggestions and strategies for ways to incorporate literacy into your courses. The first section outlines and discusses proficiencies; the second provides ideas for assignments that incorporate these concepts.

CONTENTS

Information Literacy Proficiencies	2
<i>The Research Process</i>	2
<i>Scholarly Communication in a Discipline</i>	4
Information Literacy Tutorials.....	6
Effective Library Assignments	6
Credits	8

INFORMATION LITERACY PROFICIENCIES

The concepts of information literacy fall into two areas: the **research process** and the understanding of **scholarly communication**. Within these areas we have identified 10 information literacy proficiencies that we believe to be crucial.

The Research Process

An information literate student is able to:

Formulate a strategy, and understand the way questions are refined and redefined in the course of research.

Strategies:

- Focus on process and the idea that research is not generally linear, and can involve many trajectories – some even unfruitful.
- Walk through the process of topic formulation, from general interest to statement of the research question/problem.
- Share experiences where research was stymied or blossomed, based on that found while researching; help dispel the myth that the perfect answer exists for every question, even the “obvious” ones.
- Having students submit bibliographies at various stages of research process has multiple benefits:
 - It deters procrastination.
 - They’ll find out sooner rather than later how much material is available on a given topic.
 - They’ll get used to keeping track of bibliographic data as they go along rather than scrambling to produce bibliographies at the end of the process.

Searchable concepts/keywords/synonyms

An information literate student is able to:

Distill a complicated research question into a set of search terms.

Strategies:

- Emphasize the importance of being flexible; research is a creative process!
- Teach *searching* savvy.
 - Help students understand search language that works in a search engine like Google probably will not work in the library catalog and databases.
 - Importance of keeping a list of key terms/synonyms while investigating a topic. As new terms are learned, research tools may need to be re-checked.
 - How Boolean operators (AND, OR, NOT) are used to combine key terms in ways that narrow and broaden results.
 - The difference between keyword and subject searching.
 - Situations where truncation would be helpful.

Choice of resources and databases

An information literate student is able to:

Select appropriate resources to answer the question.

Strategies:

- Teach *tool* savvy. Make students aware of the existence of various types of resources –reference material, databases, indexes, etc. – and their roles/uses.
- How do these sources differ? What are their strengths and weaknesses?
- What determines the selection of resources: timeliness, authoritativeness, format, etc.?
- Make sure students understand the difference between an Internet website and an online electronic database, especially one that offers full text articles.
- Remind the students that not everything is available online.
- The current generation of college students may not be accustomed to or comfortable with using print sources.

Evaluate information

An information literate student is able to:

Evaluate resources for usefulness, bias, currency and authority (including Internet resources).

Strategies:

- Emphasize resource evaluation as critical thinking.
- Help students understand that any and all resources, regardless of format, should be judged and evaluated with a particular set of criteria.
- Help students set criteria upon which sources should be evaluated.
- Discuss where information can be found that could help to evaluate sources.

Sample list of Evaluation Criteria:

- External factors: author's credentials, publisher's credentials/reputation, date/currency, documentation (bibliographies, foot/end-notes).
- Internal factors: evidence to back up assertions, clear & logical arguments. Are all contributing factors considered; are all/most ramifications considered?

Citations: documenting sources

An information literate student is able to:

Understand different types of bibliographic citations and uses a style manual to correctly document information sources in many different formats.

Strategies:

- Make your expectations clear. Tell students which is the preferred style manual for this course or discipline (APA, MLA, etc.)
- Map it out.
 - Outline the basic elements of citations.
 - Distinguish between citing an article in a print and electronic source.
 - Demonstrate the way sites from the Internet should be cited.
 - Require students to submit all citations in the correct format. Discuss why it matters.

- Emphasize the importance of gathering citation information at the time the source is used. Backtracking is not fun.

Plagiarism

An information literate student is able to:

Understand intellectual property issues (quoting, paraphrasing, attributing ideas).

Strategies:

- An ounce of prevention. Help students understand the nature of intellectual property and when credit is due.
 - When do we need to acknowledge another person's ideas?
 - What are "common knowledge" and "original thought"?
 - What is good paraphrasing? How does it differ from a direct quotation?
 - In what ways does research in an electronic 'cut and paste' environment impact issues of intellectual property?
- How do the college's rules address plagiarism?

Scholarly Communication in a Discipline

Communication within a discipline

An information literate student is able to:

Understand that each discipline may have its own way of generating, controlling, and using information.

Strategies:

- Make the invisible visible by using your own process as example.
 - How/why you selected course readings.
 - Do these particular articles demonstrate the scholarly communication in your discipline?
 - Highlight your own critical thinking process in relation to the assigned readings.
- What is the current state of research in your field? How does your discipline structure information?
 - What kinds of topics are being written about, discussed and presented?
 - How do people disseminate the information? Online, in print, at conferences, etc.?
 - How do research methods and contexts vary in different disciplines?

Types of publications: format/focus/currency

An information literate student is able to:

Understand the nature of different types of publications, and why and when they are useful.

Strategies:

- Explain format and examine some of the different types.
- Examine the relationship/relative roles of different types of information sources.
 - Various formats: how their differences relate to their potential usefulness.

- Difference of focus: narrow in many journal articles, broader for books.
- The factor of timeliness: when is it important, and why?
- How do the roles of books, journal articles, and other types of publications differ in different disciplines/fields?
- Trace the progression of an event from publication in informal/popular sources to formal/scholarly sources.
 - The *Information Cycle*, an online presentation from Penn State University Libraries, uses the Columbine killings to demonstrate this process: http://www.libraries.psu.edu/content/dam/psu/up/lls/audiovideo/infocycle_2008.swf (Sound required).
 - Reverse the process by tracing the progression of scholarly research to popular/informal coverage.

Popular vs. scholarly

An information literate student is able to:

Distinguish between popular and scholarly material and understand that any topic can have both; determine when it is appropriate to use each type and why.

Strategies:

- Work with students to help them understand why being able to distinguish between these types of material is important.
- Consider the source of information and its intended audience.
- Examine a scholarly and a popular source. How do they differ in terms of authorship, content, and editorial policy?
- Use examples to identify ways scholarly or popular sources can be identified.

Primary vs. secondary

An information literate student is able to:

Distinguish between primary and secondary resources and determine when it is appropriate to use these types of resources and why.

Strategies:

- How might different fields of study (biology, English literature, and politics, for example) have different “rules” about what constitutes primary and secondary sources?
- How does context determine whether a source is primary or secondary in a particular instance?
- What does primary/secondary mean in your discipline?
- What potential ambiguities arise when a source can be considered primary in one situation or discipline and secondary in another, based on the question asked and when it is asked?

INFORMATION LITERACY TUTORIALS

While there are many tutorials available online that can introduce your students to key concepts in information literacy, librarians at Johnson State College and the Community College of Vermont have collaborated to create an adaptation of the University of Texas—Austin’s award winning tutorial, **TILT**.

Vermont State Colleges: The Information Literacy Tutorial

The Vermont State College's TILT is an educational website designed to introduce students to research sources and skills.

Students will satisfy the graduation standard for information literacy by successfully completing the VSC TILT tutorial and the four related assessments mounted on Moodle.

Students must register for the TILT Information Literacy Tutorial during the semester they plan to take the assessment.

JSC Point-of-Use Tutorials

The JSC Library has developed a series of videos for searching specific databases and using services such as Interlibrary Loan. These brief movies are mounted on the [Guides and Help](#) page of the Library website.

EFFECTIVE LIBRARY ASSIGNMENTS

Library considerations

- When designing an assignment, call the library staff to discuss the specifics. Librarians can suggest resources needed to complete it.
- Let the library reference desk know about an assignment if it will require heavy use of certain sources.
- Schedule an instruction session for your class. Don't assume your students are experienced researchers. Many college students have had little experience with resources beyond Web search engines. They may not be comfortable with using print sources or research databases.
- Try to avoid the mob scene where the entire class has an assignment that requires only one or two specific resources. If this is unavoidable, place these items on reserve.
- If you need to place materials on reserve, *please* give the library sufficient time to process and make it available.
- Encourage students to ask for assistance. We want students to have successful library experiences as they seek information.

Assignment details

- Give the details of the assignment in writing whenever possible. Oral instructions can have a way of becoming muddled and confused. If possible, send a copy of the assignment to the reference desk.

- Remind the students that not everything is available online. You can require they use sources in different formats: academic journals, newspapers, primary and secondary sources, print and online, videos, etc.
- Make sure your students know your policy on the use of online resources. Reading a full-text article from an EBSCOhost database such as *Academic Search Premier* is not the same as using Web search engines such as Google or Yahoo. At the same time, some Internet Web pages may be the best and most current source of information. Be clear where you stand on this.
- If you allow the use of Web pages, give your students the tools to evaluate them and require that they do so. You can also schedule library instruction or ask the reference librarians for help finding materials about Web evaluation.

Potential Exercises for Specific Information Literacy Standards

1. *Research strategy*

- Have students keep logs on the ways their topic changes and evolves as they do research and encounter more (or less) information. (Allowing the option for a visual mapping of this process may be helpful for some students.)
- Have students state the question/research problem and then consider what kinds of information sources will be needed to answer the question (i.e. primary/secondary sources, books, articles, videos, statistical sources, reference works, etc.)

2. *Searchable concepts/keywords/synonyms*

- Have students describe their topics in a few sentences. Have them “diagram” their research statement, picking out the most important keywords, brainstorming synonyms and related concepts.
- Have students demonstrate how Boolean operators are used to combine key terms in ways that narrow or broaden results.
- Ask students to keep a research log, charting the changes in their thinking about the topic based on the results of their searching.

3. *Choose resources and databases*

- Have students state which resources they will use to find the kinds of information they said they needed, e.g., “I will use the VSC Online Catalog to find books and videos. I will use X and Y databases to find articles in scholarly journals.”
- Have students consult two reference sources to answer a particular question, one a general encyclopedia and the other a subject encyclopedia, and compare treatment of the topic in the two sources; have them note what else the tool could be used for.
- Have students conduct a search for the same topic in two different databases and compare/contrast the results.

4. *Evaluate information*

- Have small groups examine texts/websites etc. and evaluate them according to agreed upon criteria. (authority, accuracy, objectivity, currency, coverage)
- Evaluate Web Resources. Module 3 of TILT provides examples of Web pages to consider.
- Use examples of various criteria and an opportunity to “Test your own critical thinking.”

5. *Citations: documenting sources*

- Provide copies of books (single author, edited essays, etc.), journals and magazines, full-text printouts from library databases, and website home pages. Have students identify the parts needed to create a citation.
- Have students turn in citations in the proper format with early drafts of papers. Alternately, require a bibliography early in the semester with citations in the proper format.

6. *Plagiarism*

- Give students excerpts from books/articles, etc. and have them practice paraphrasing and quoting, and properly citing the material.
- Provide both acceptable and unacceptable paraphrases of the same excerpt. How do they differ?

7. *Communication in a discipline*

- Write a brief outline of the ways in which the ordering, production and dissemination of research might shape the development of new knowledge.

8. *Types of publications: format/focus/currency*

- Have students compare and contrast treatment of a specific topic/question/issue in a book and in an article.
- Take a contemporary account of an historic event and compare it with current discussion of the same event.
- Have students identify a topic for which the majority of published information would be in article form (a recent trend or field of exploration for example.)
- Have students apply the flow of information discussion above to a given event/trend/theory.

9. *Popular vs. scholarly*

- Have students identify and compare a scholarly article and a popular article that treat the same topic.
- Give students several scholarly articles and ask them to identify the common features among the articles.
- Provide students with a variety of resources (articles, websites, etc.) and have them make arguments about whether, and why, they would classify each as being scholarly.

10. *Primary vs. secondary*

- Give students several research questions/theses, and have them make a list of the kinds of primary resource materials scholars might seek in each case.
- Have students evaluate a primary source. What was the purpose/intent of the source; who was its author/originator?
- Ask students to consider a particular source (e.g. book, journal article, conference proceeding,) and think about whether there are circumstances under which it might be considered a primary source, and other circumstances under which it might be considered a secondary source.
- Have students consider various kinds of writing they have done (autobiographical/experiential, essays, research papers), and discuss whether these materials would be considered primary or secondary sources, and under what circumstances.

CREDITS

This is an adaptation of *Incorporating Information Literacy into Oberlin's First Year Seminars Faculty Guide* <http://www.oberlin.edu/library/programs/fys/guide.pdf> by Oberlin College Library, May 2002. [Rev. May 2003]. We thank the librarians of Oberlin College Library's Reference Work Group for permission to use their guide as a template. Janet Thorn chaired the VSC Reference Librarian's group for this project; Linda Kramer revised the copy for Johnson State College, May 2006. All links were checked and the file was updated August 2011.

